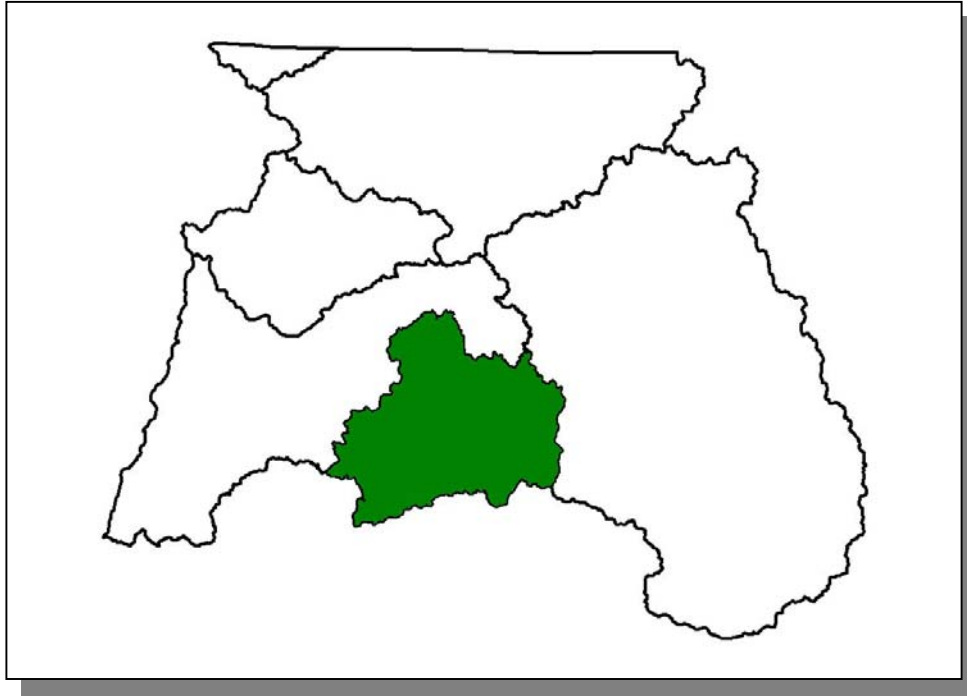
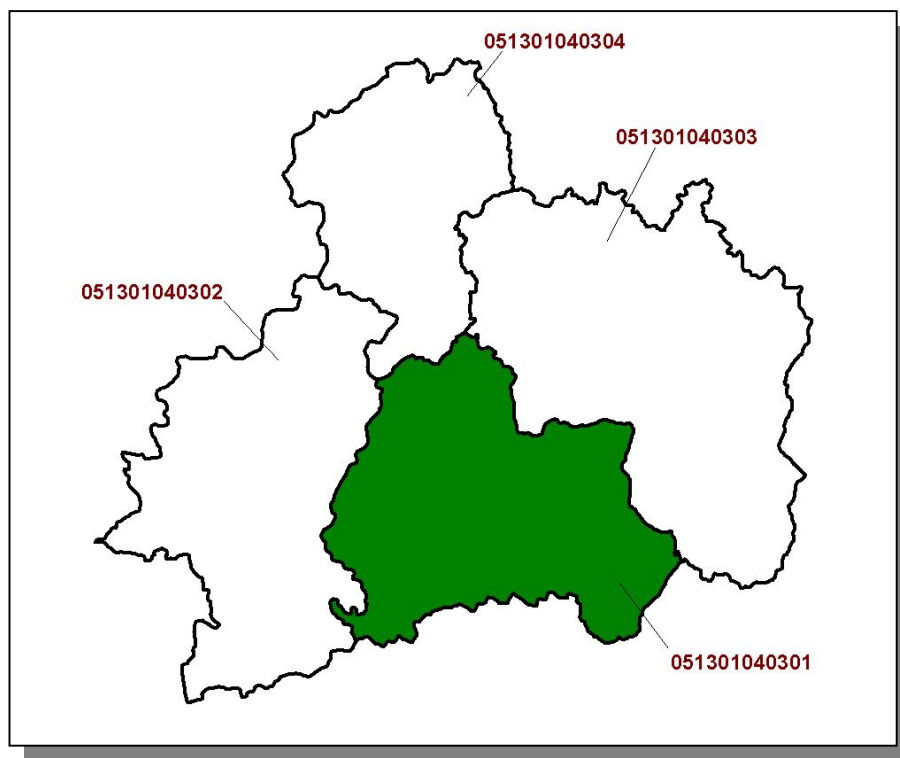


**4.2.C. 0513010403.**

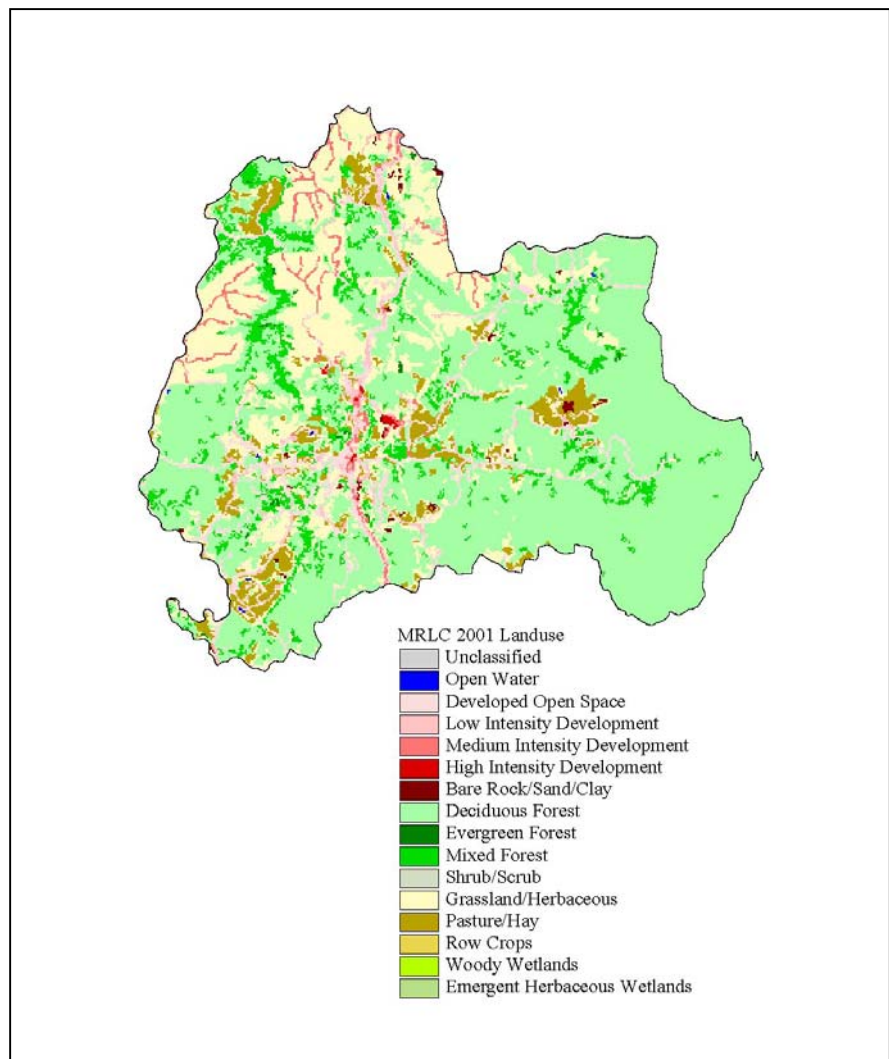


**Figure 4-109. Location of Subwatershed 0513010403.** All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

**4.3.C.i.** 051301040301 (Upper Whiteoak Creek).

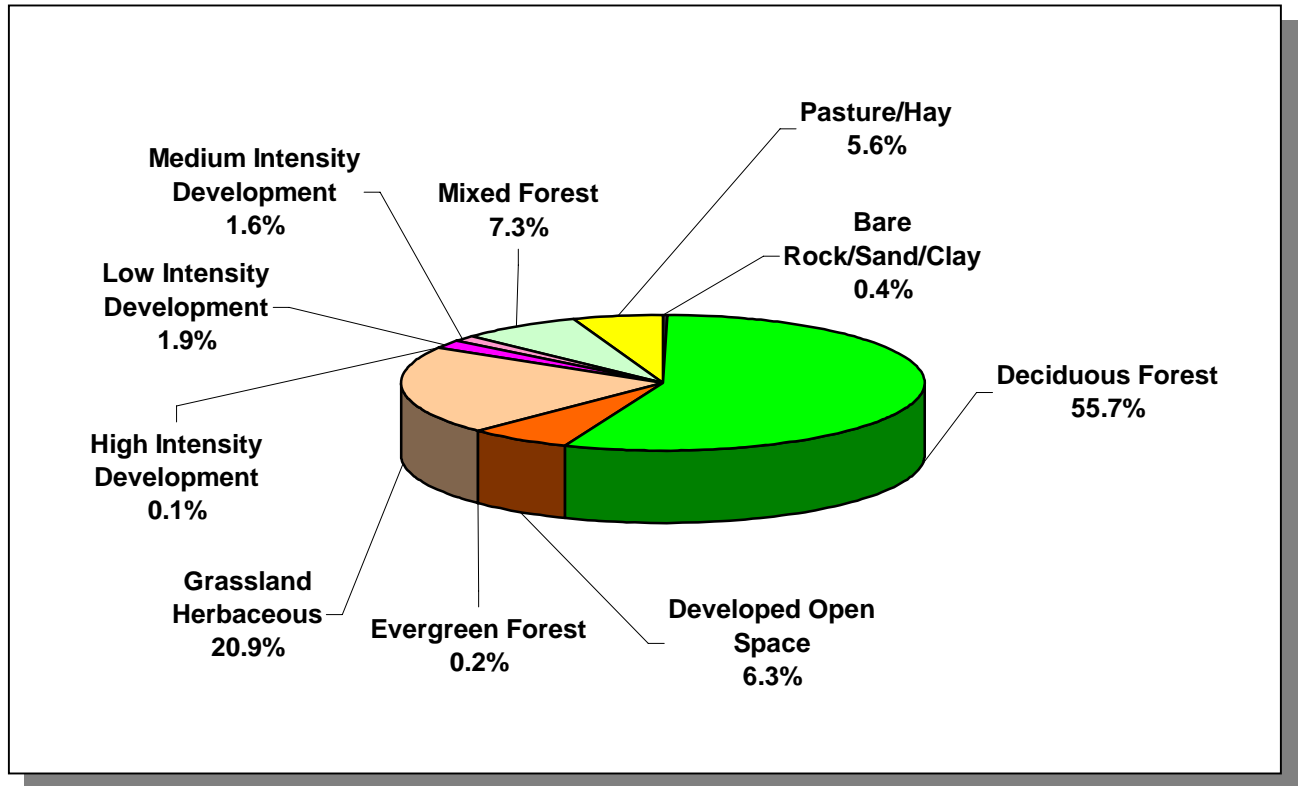


**Figure 4-110. Location of Subwatershed 051301040301.** All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.



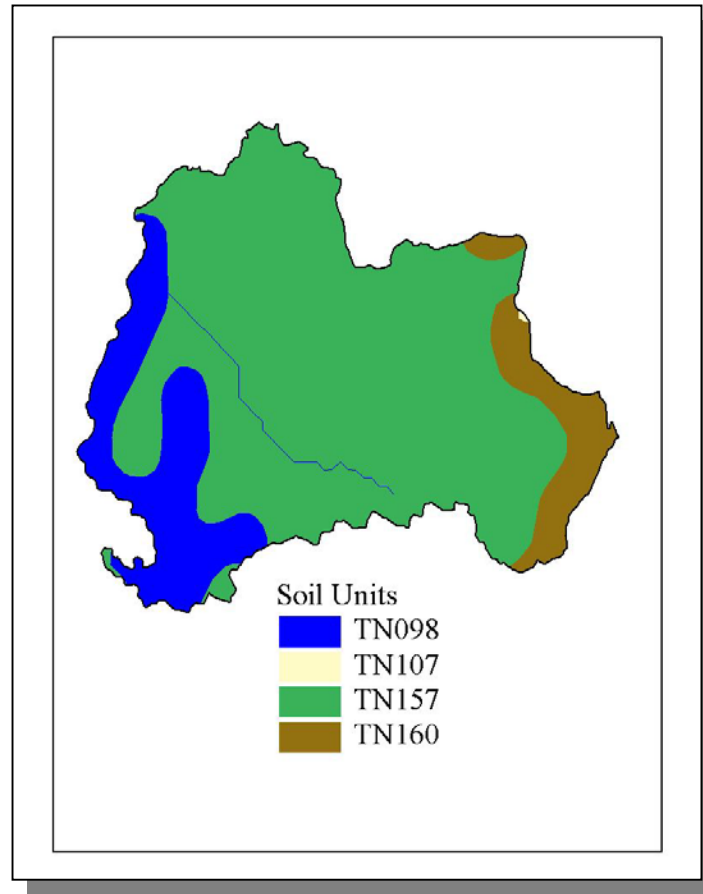
**Figure 4-111. Illustration of Land Use Distribution in Subwatershed 051301040301.**

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**Figure 4-112. Land Use Distribution in Subwatershed 051301040301.** More information is provided in Appendix IV.

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**Figure 4-113. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040301.**

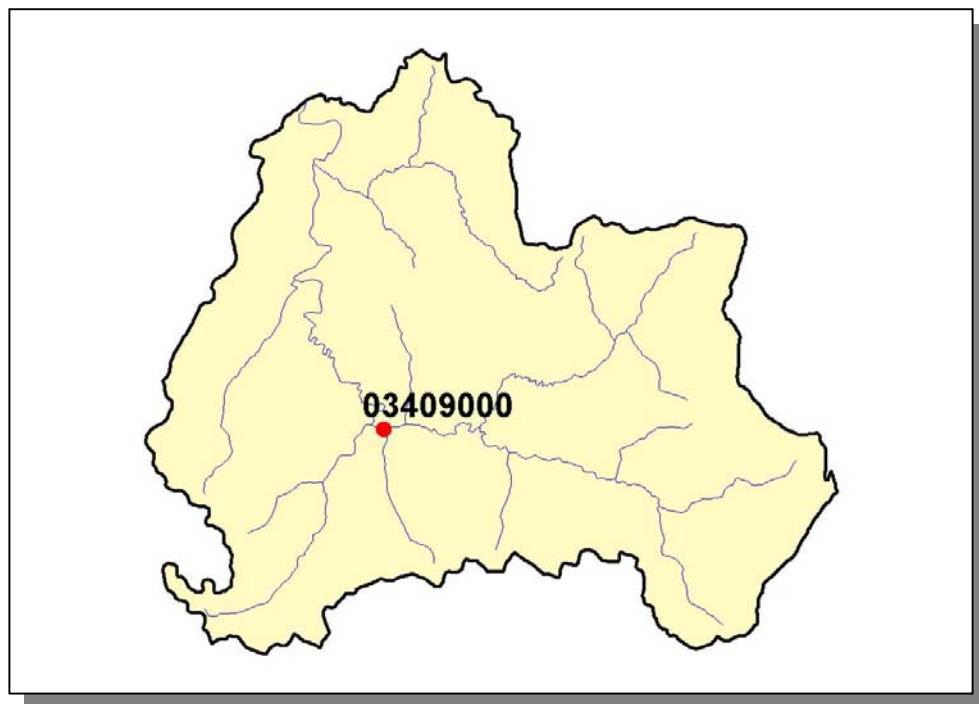
STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	C	3.98	4.82	Loam	0.32
TN107	1.00	C	6.34	4.84	Loam	0.28
TN157	0.00	B	2.38	4.62	Loam	0.28
TN160	0.00	B	2.69	5.36	Loam	0.25

**Table 4-82. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040301.** The definition of "Hydrologic Group" is provided in Appendix IV.

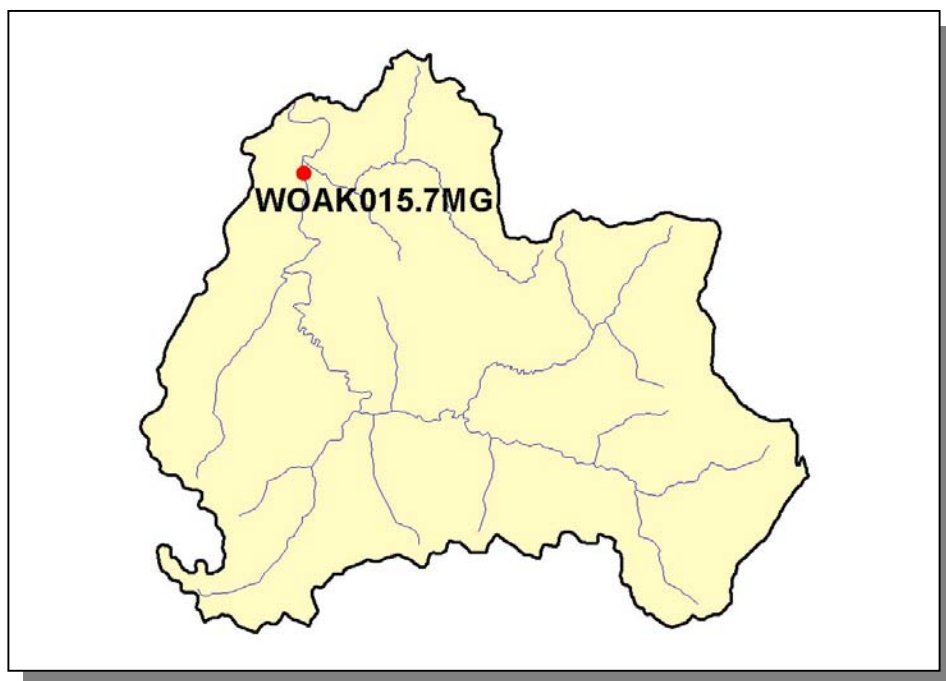
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	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Morgan	17,300	18,521	19,757	5.06	876	938	1,000	14.2

*Table 4-83. Population Estimates in Subwatershed 051301040301.*



**Figure 4-114. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040301.** More information is provided in Appendix IV.



**Figure 4-115. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040301.** More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

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**4.2.C.i.a. Point Source Contributions.**

There are no point source contributions in this subwatershed.

**4.2.C.i.b. Nonpoint Source Contributions.**

<b>LIVESTOCK (COUNTS)</b>						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
225	423	12	<5	71,795	4	<5

**Table 4-84. Summary of Livestock Count Estimates in Subwatershed 051301040301.**

According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

<b>LIVESTOCK COUNTS</b>							
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep
Morgan	4,697	8,853	251	1,501,559	194	83	35

**Table 4-85. Summary of Livestock Count Estimates in Morgan County.** According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	<b>INVENTORY</b>		<b>REMOVAL RATE</b>	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Morgan	287.8	276.2	3.5	10.9

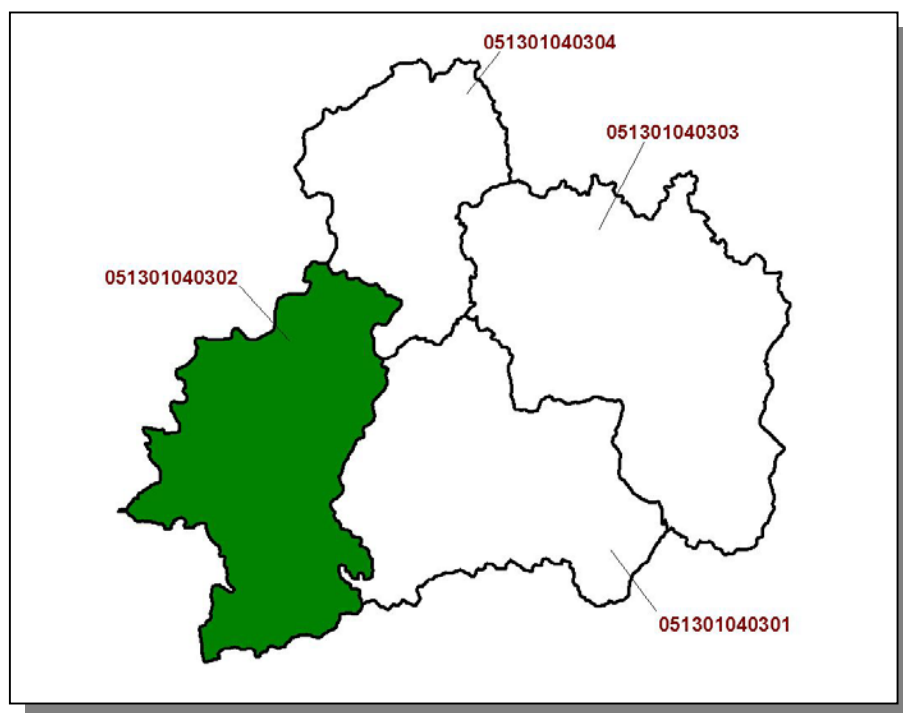
**Table 4-86. Forest Acreage and Annual Removal Rates (1987-1994) in Morgan County.**

<b>CROPS</b>	<b>TONS/ACRE/YEAR</b>
Grass (Pastureland)	0.42
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.11
Corn (Row Crops)	7.18
Farmsteads and Ranch Headquarters	0.04

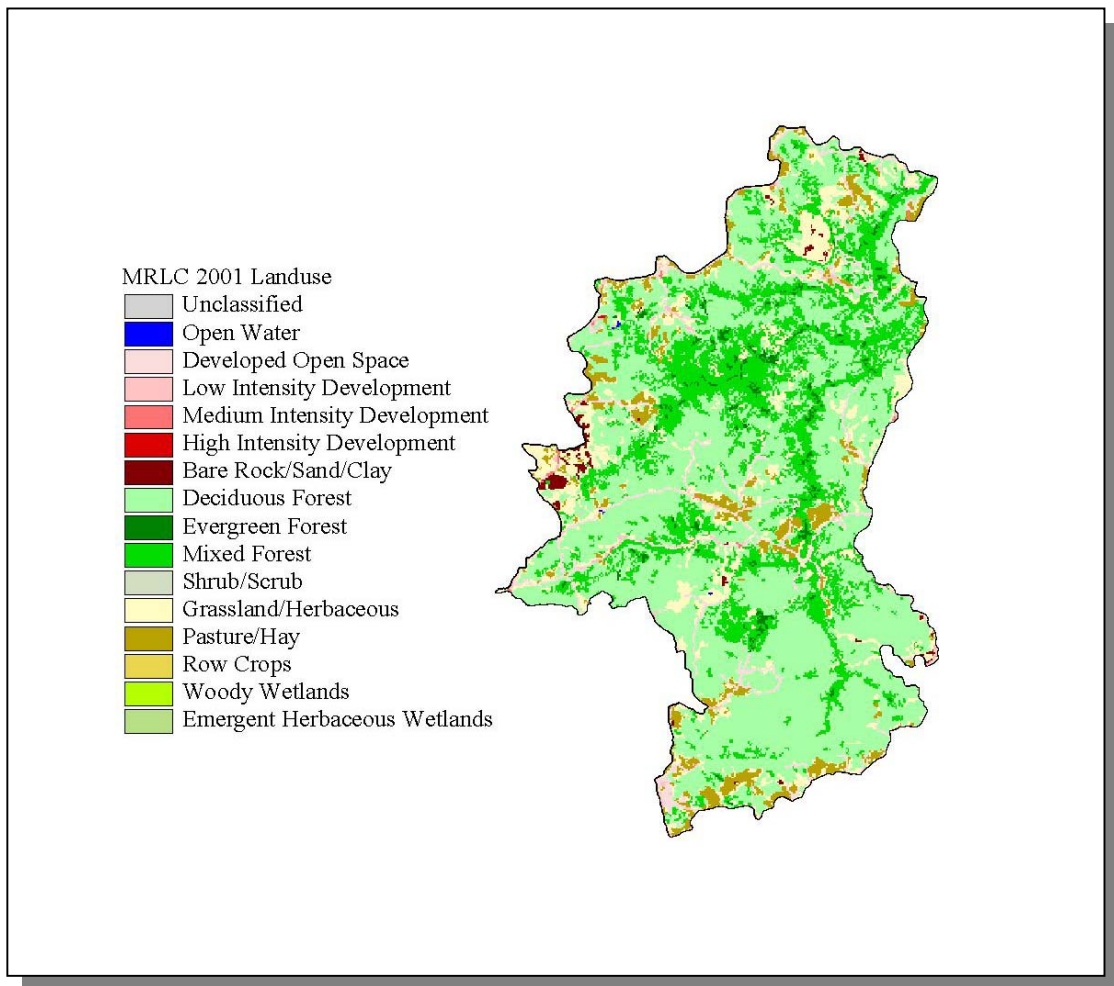
**Table 4-87. Annual Estimated Total Soil Loss in Subwatershed 051301040301.**



**4.3.C.ii.** 051301040302 (Camp Creek).

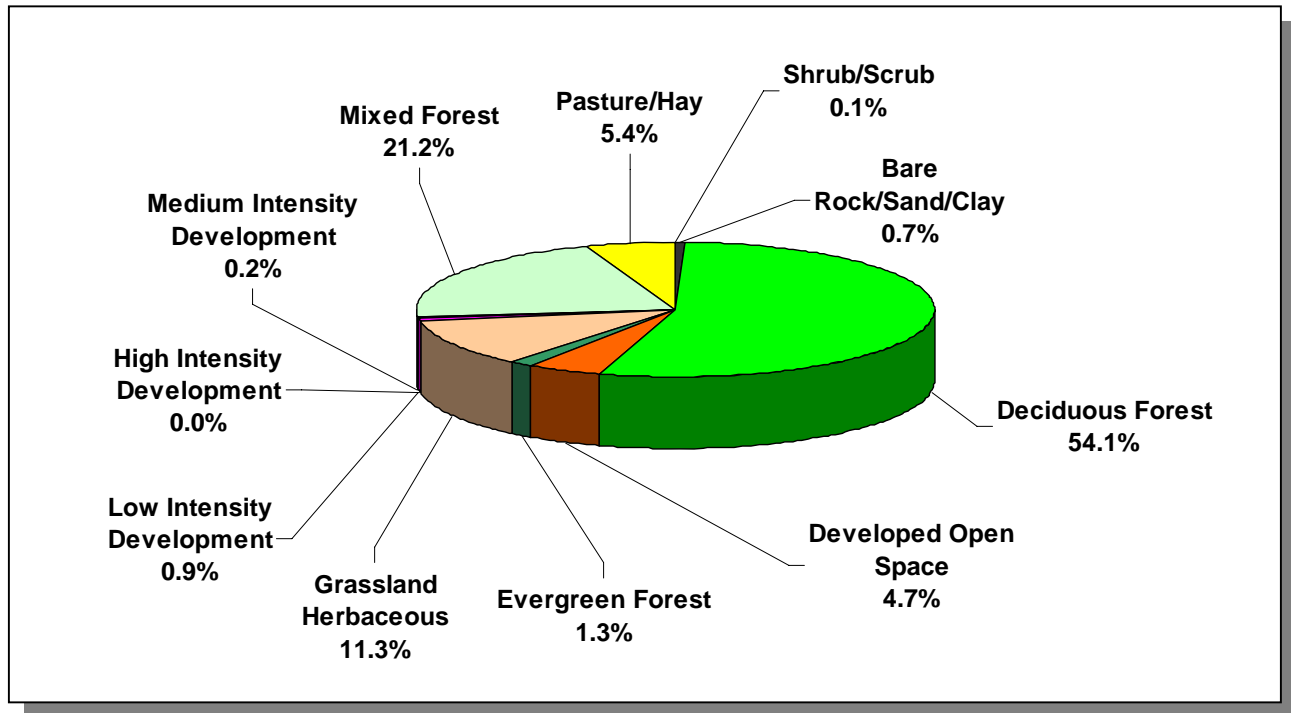


**Figure 4-116. Location of Subwatershed 051301040302.** All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.



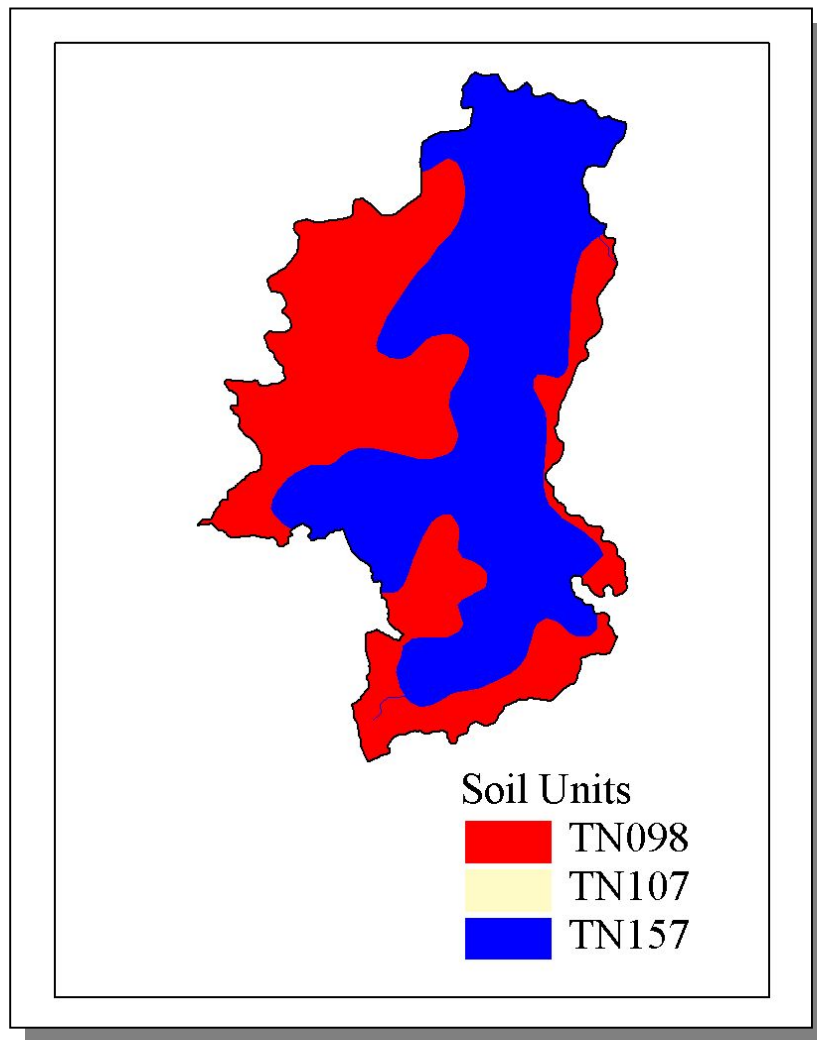
**Figure 4-117. Illustration of Land Use Distribution in Subwatershed 051301040302.**

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**Figure 4-118. Land Use Distribution in Subwatershed 051301040302.** More information is provided in Appendix IV.

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**Figure 4-119. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040302.**

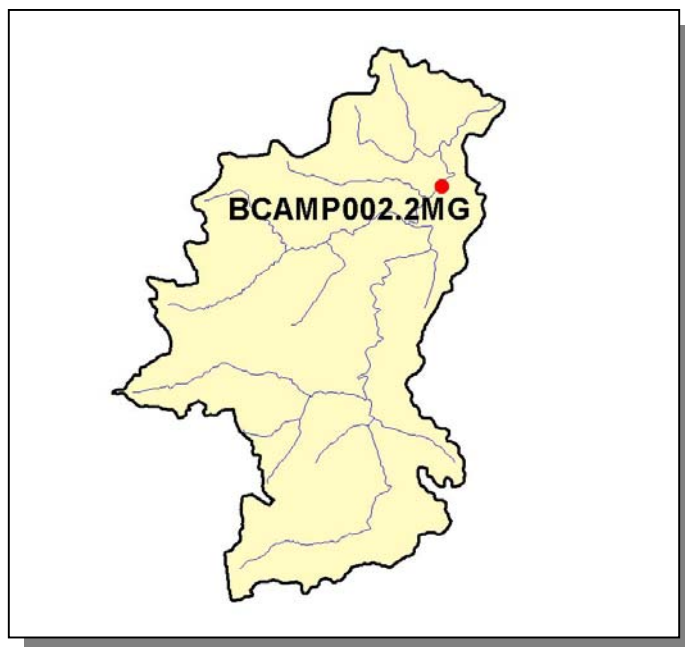
STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	C	3.98	4.82	Loam	0.32
TN107	1.00	C	6.34	4.84	Loam	0.28
TN157	0.00	B	2.38	4.62	Loam	0.28

**Table 4-88. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040302.** The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Morgan	17,300	18,521	19,757	5.1	883	945	1,008	14.2

**Table 4-89. Population Estimates in Subwatershed 051301040302.**



**Figure 4-120. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040302.** More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

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**4.2.C.ii.a. Point Source Contributions.**

There are no point source contributions in this subwatershed.

**4.2.C.ii.b. Nonpoint Source Contributions.**

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
265	500	14	<5	84,750	5	<5

**Table 4-90. Summary of Livestock Count Estimates in Subwatershed 051301040302.**

According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep
Morgan	4,697	8,853	251	1,501,559	194	83	35

**Table 4-91. Summary of Livestock Count Estimates in Morgan County.** According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

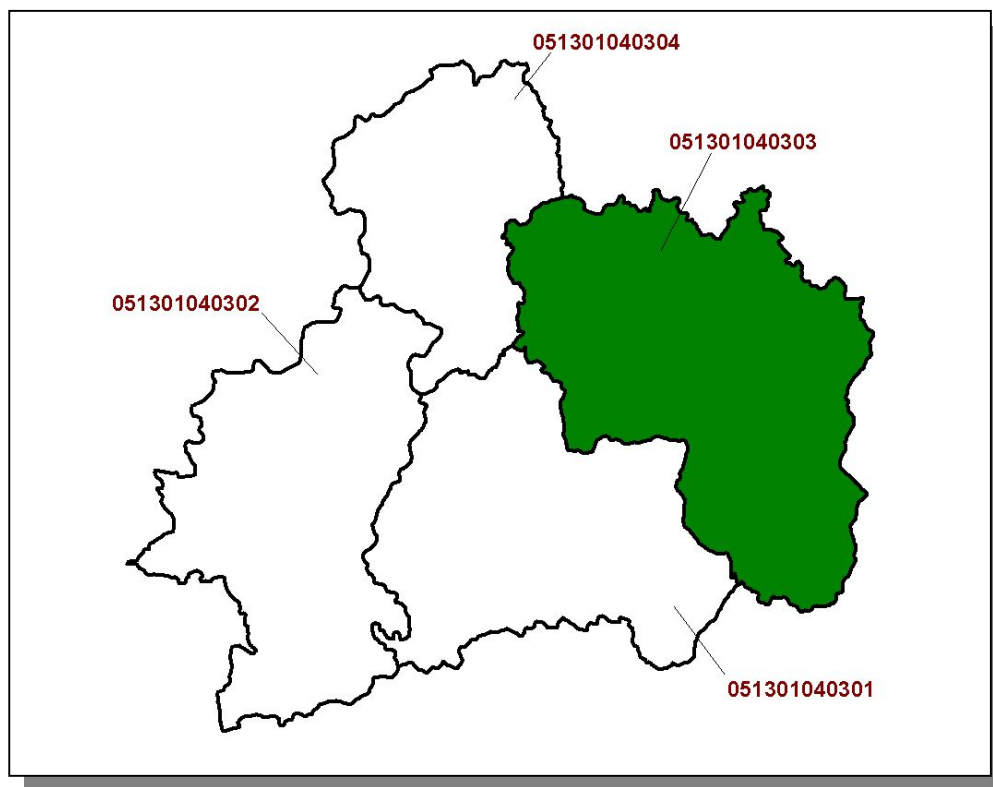
County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Morgan	287.8	276.2	3.5	10.9

**Table 4-92. Forest Acreage and Annual Removal Rates (1987-1994) in Morgan County.**

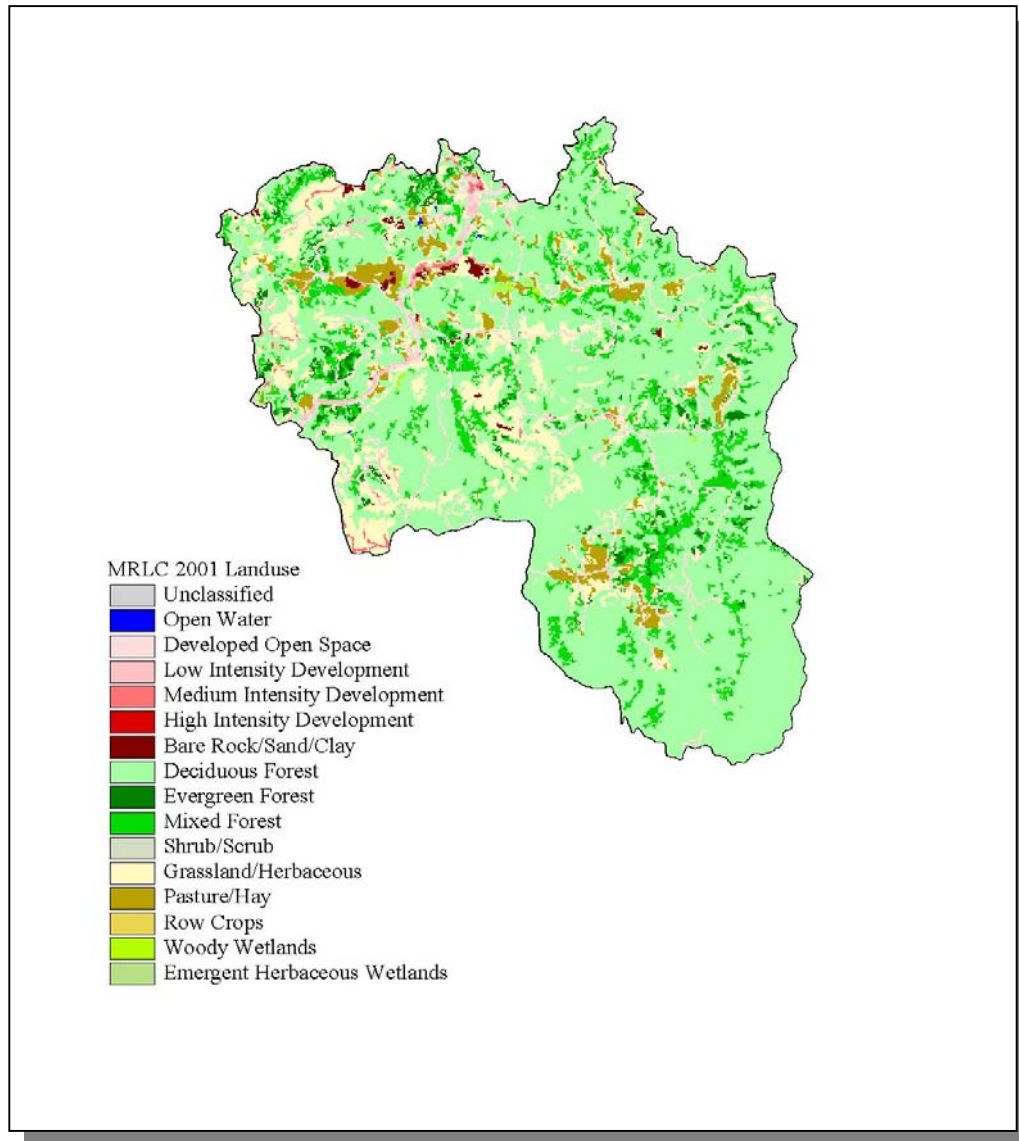
CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.42
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.11
Corn (Row Crops)	7.18
Farmsteads and Ranch Headquarters	0.04

**Table 4-93. Annual Estimated Total Soil Loss in Subwatershed 051301040302.**

**4.3.C.iii. 051301040303 (Black Wolf Creek).**

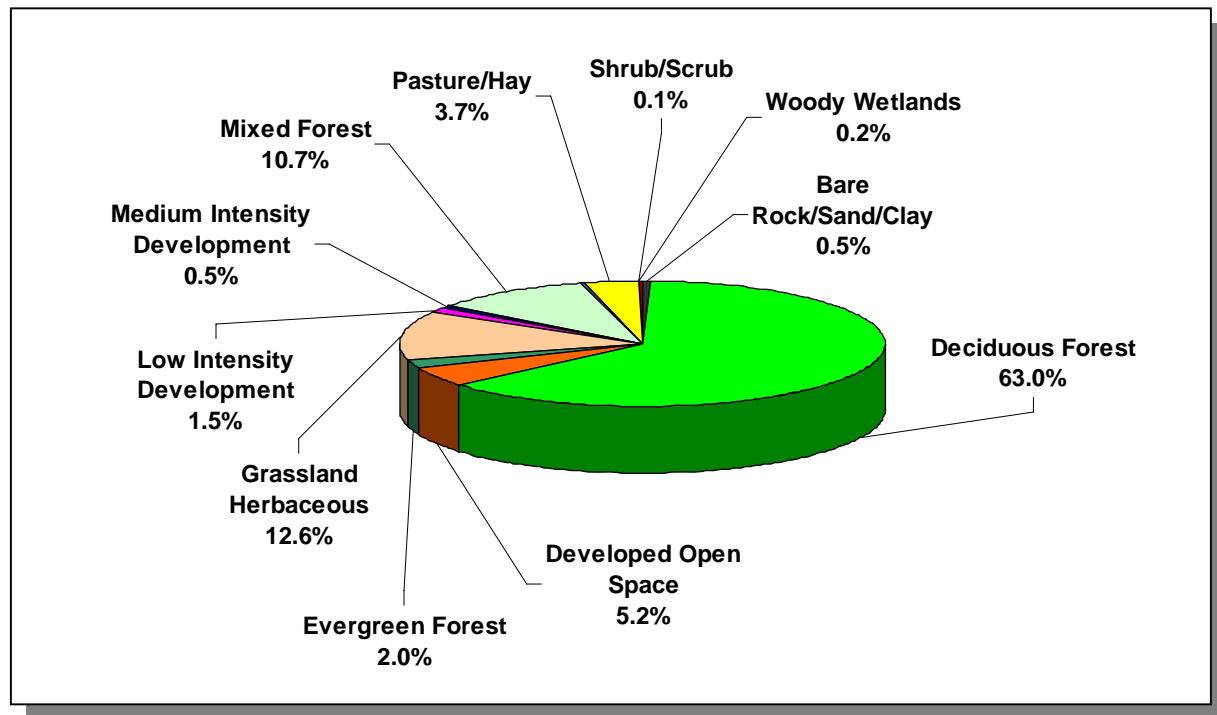


**Figure 4-121. Location of Subwatershed 051301040303.** All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

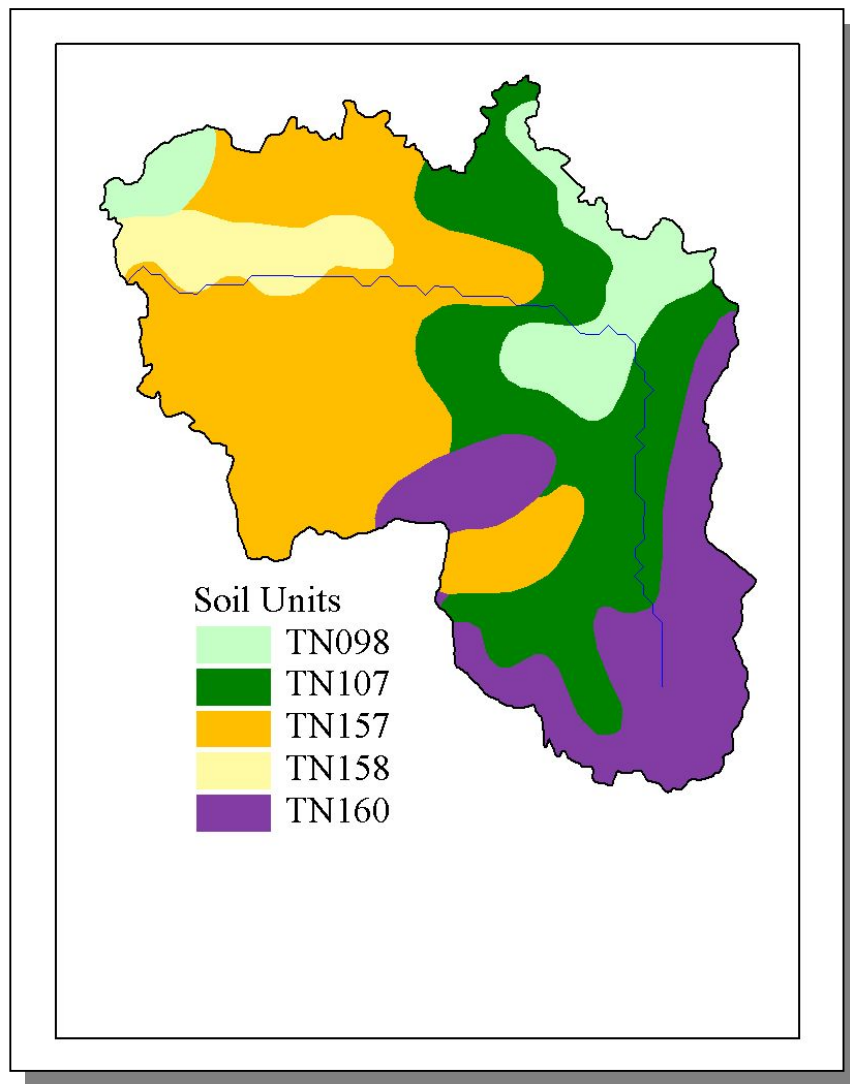


**Figure 4-122. Illustration of Land Use Distribution in Subwatershed 051301040303.**





**Figure 4-123. Land Use Distribution in Subwatershed 051301040303.** More information is provided in Appendix IV.



**Figure 4-124. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040303.**

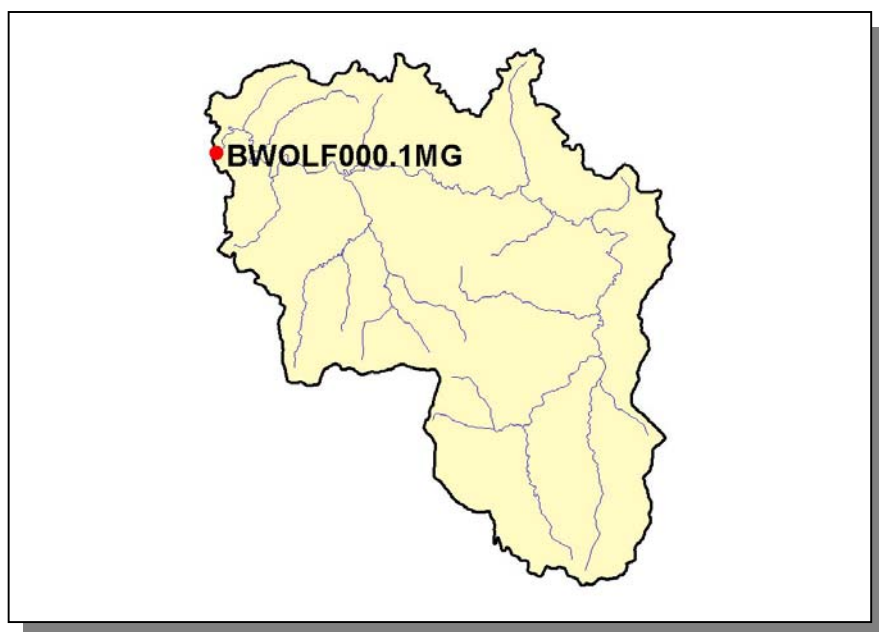
STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	C	3.98	4.82	Loam	0.32
TN107	1.00	C	6.34	4.84	Loam	0.28
TN157	0.00	B	2.38	4.62	Loam	0.28
TN158	22.00	C	1.89	5.14	Silty Loam	0.29
TN160	0.00	B	2.69	5.36	Loam	0.25

**Table 4-94. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040303.** The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Morgan	17,300	18,521	19,757	2.14	370	396	423	14.3
Scott	18,358	19,816	21,127	4.18	767	828	883	15.1
<b>Total</b>	<b>35,658</b>	<b>38,337</b>	<b>40,884</b>		<b>1,137</b>	<b>1,224</b>	<b>1,306</b>	<b>14.9</b>

*Table 4-95. Population Estimates in Subwatershed 051301040303.*



*Figure 4-125. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040303. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.*

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**4.2.C.iii.a. Point Source Contributions.**

There are no point source contributions in this subwatershed.

**4.2.C.iii.b. Nonpoint Source Contributions.**

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
184	359	14	<5	106,571	<5	4

**Table 4-96. Summary of Livestock Count Estimates in Subwatershed 051301040303.**  
According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep
Morgan	4,697	8,853	251	1,501,559	194	83	35
Scott	2,177	4,447	216	1,989,506	196	17	74

**Table 4-97. Summary of Livestock Count Estimates in Morgan and Scott Counties.**  
According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

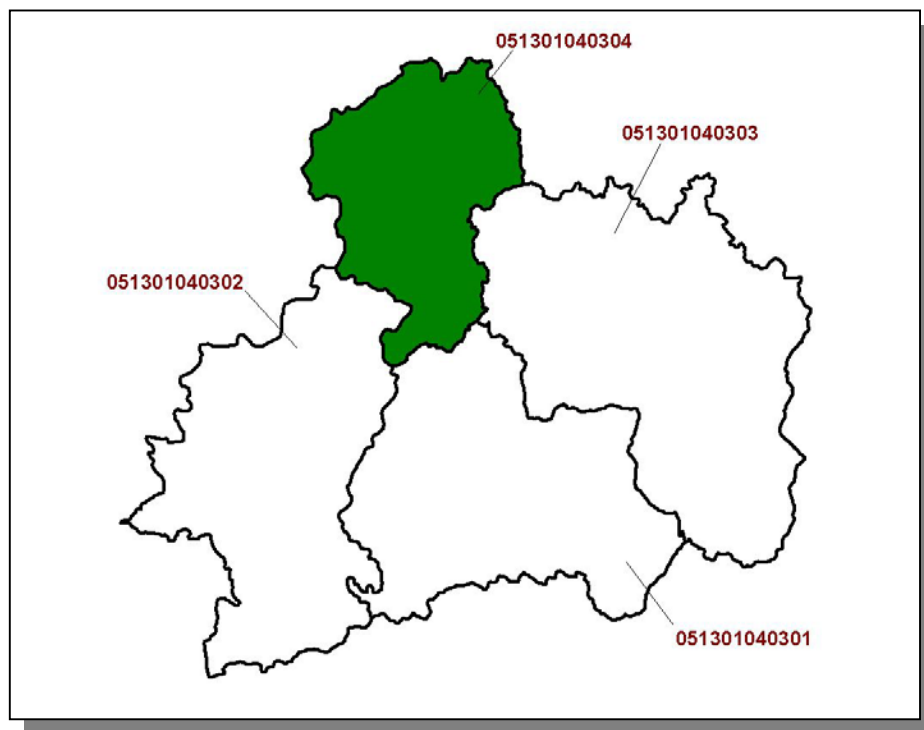
County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Morgan	287.8	276.2	3.5	10.9
Scott	300.3	300.3	5.5	21.4

**Table 4-98. Forest Acreage and Annual Removal Rates (1987-1994) in Morgan and Scott Counties.**

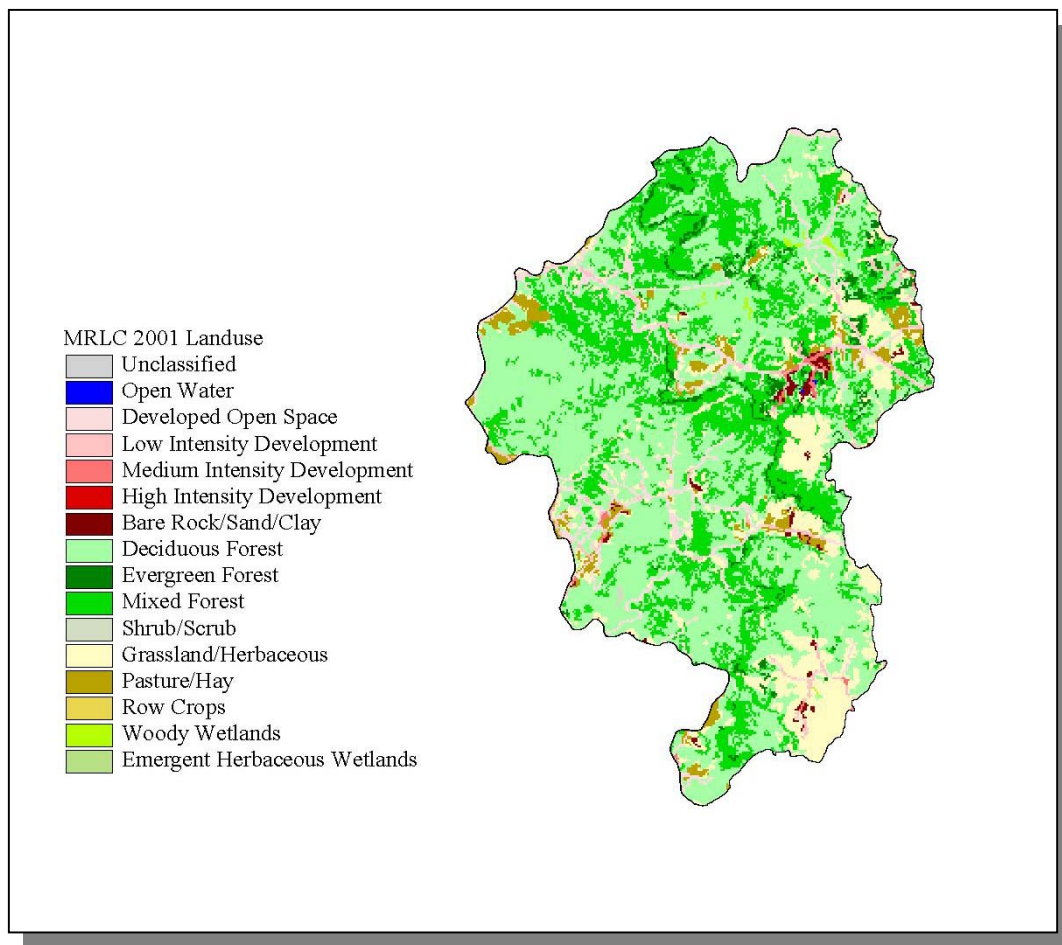
CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.36
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.43
Corn (Row Crops)	7.18
Farmsteads and Ranch Headquarters	0.07

**Table 4-99. Annual Estimated Total Soil Loss in Subwatershed 051301040303.**

**4.3.C.iv. 051301040304 (Lower Whiteoak Creek).**

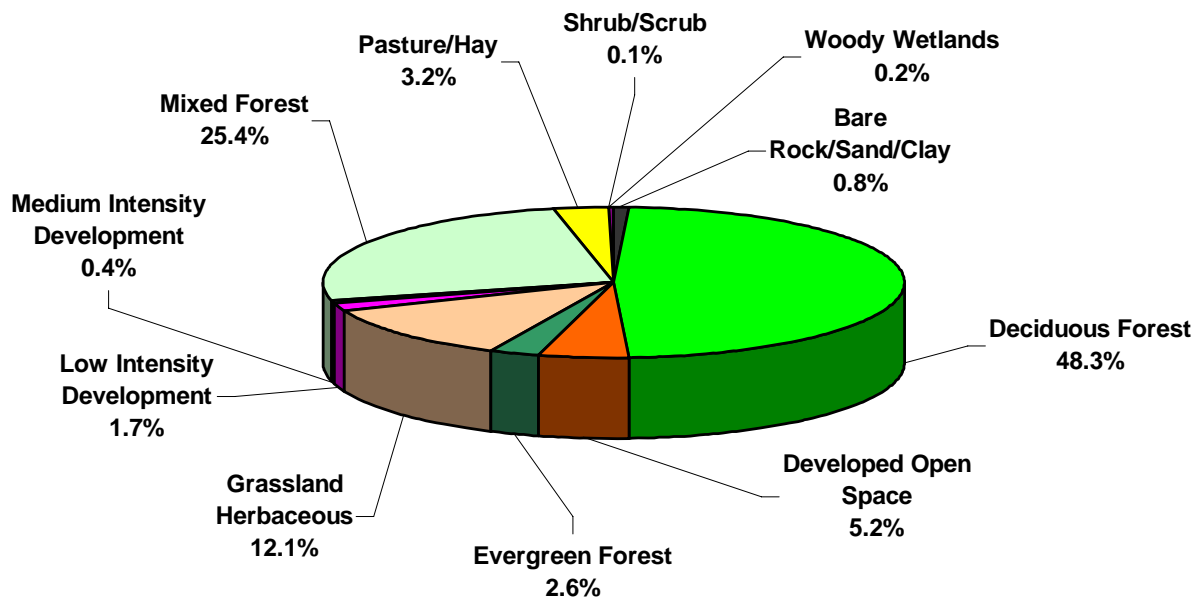


**Figure 4-126. Location of Subwatershed 051301040304.** All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.



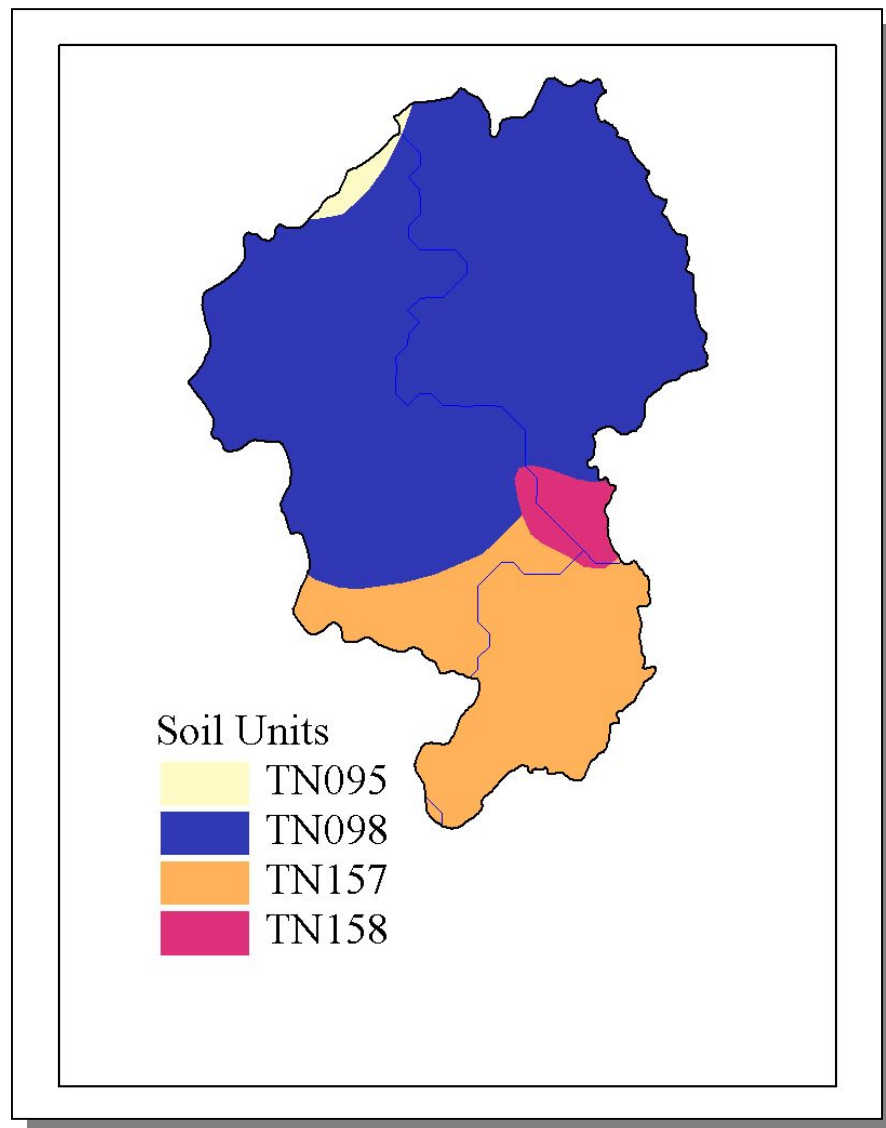
**Figure 4-127. Illustration of Land Use Distribution in Subwatershed 051301040304.**

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**Figure 4-128. Land Use Distribution in Subwatershed 051301040304.** More information is provided in Appendix IV.

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**Figure 4-129. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040304.**

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN157	0.00	B	2.38	4.62	Loam	0.28
TN158	22.00	C	1.89	5.14	Silty Loam	0.29

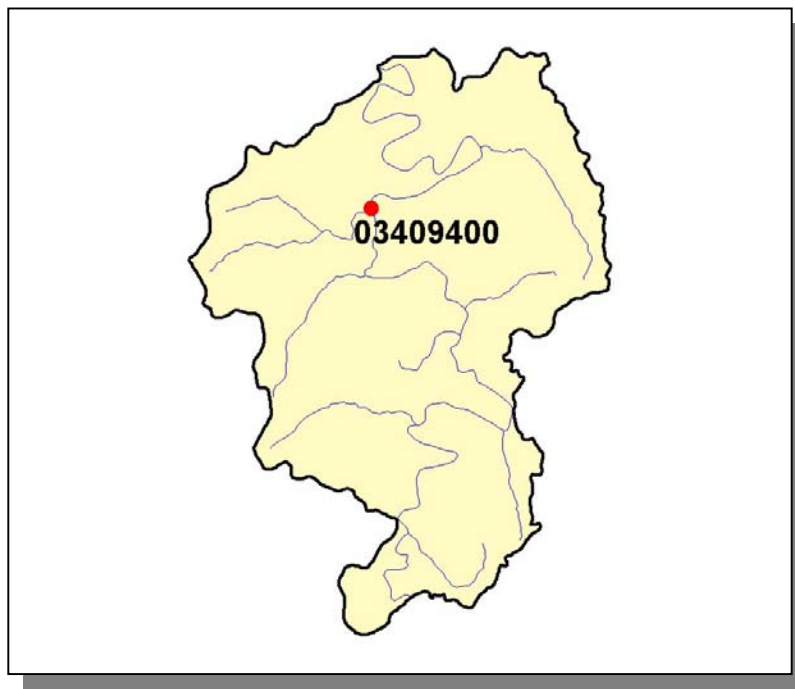
**Table 4-100. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040304.** The definition of "Hydrologic Group" is provided in Appendix IV.



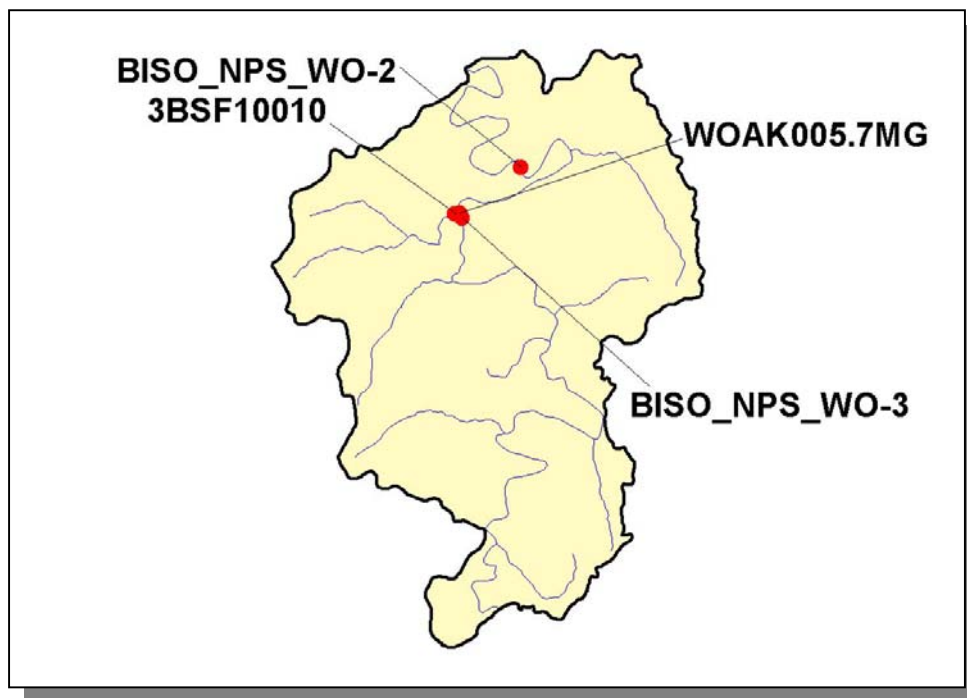
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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Morgan	17,300	18,521	19,757	2.35	406	435	464	14.3
Scott	18,358	19,816	21,127	0.88	161	174	185	14.9
<b>Total</b>	<b>35,658</b>	<b>38,337</b>	<b>40,884</b>		<b>567</b>	<b>609</b>	<b>649</b>	<b>14.5</b>

*Table 4-101. Population Estimates in Subwatershed 051301040304.*



**Figure 4-130. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040304.** More information is provided in Appendix IV.



**Figure 4-131. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040304.** More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

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**4.2.C.iv.a. Point Source Contributions.**

There are no point source contributions in this subwatershed.

**4.2.C.iv.b. Nonpoint Source Contributions.**

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Hogs	Sheep
143	273	9	59,300	<5	<5

**Table 4-102. Summary of Livestock Count Estimates in Subwatershed 051301040304.** According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep
Fentress	8,058	17,259	430	7,290,026	474	729	79
Morgan	4,697	8,853	251	1,501,559	194	83	35
Scott	2,177	4,447	216	1,989,506	196	17	74

**Table 4-103. Summary of Livestock Count Estimates in Fentress, Morgan, and Scott Counties.** According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

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County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fentress	244.1	244.1	3.6	14.3
Morgan	287.8	276.2	3.5	10.9
Scott	300.3	300.3	5.5	21.4

**Table 4-104. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress, Morgan, and Scott Counties.**

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.40
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.24
Corn (Row Crops)	7.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.05

**Table 4-105. Annual Estimated Total Soil Loss in Subwatershed 051301040304.**